

Chapter 15

Preapproved Wall Appendix: Specific Requirements and Details for Eureka Reinforced Soil Concrete Panel Walls

In addition to the general design requirements provided in **Appendix 15-A**, the following specific requirements apply to the design of the Hilfiker Eureka Reinforced Soil concrete 5 ft x 5 ft panel faced retaining wall:

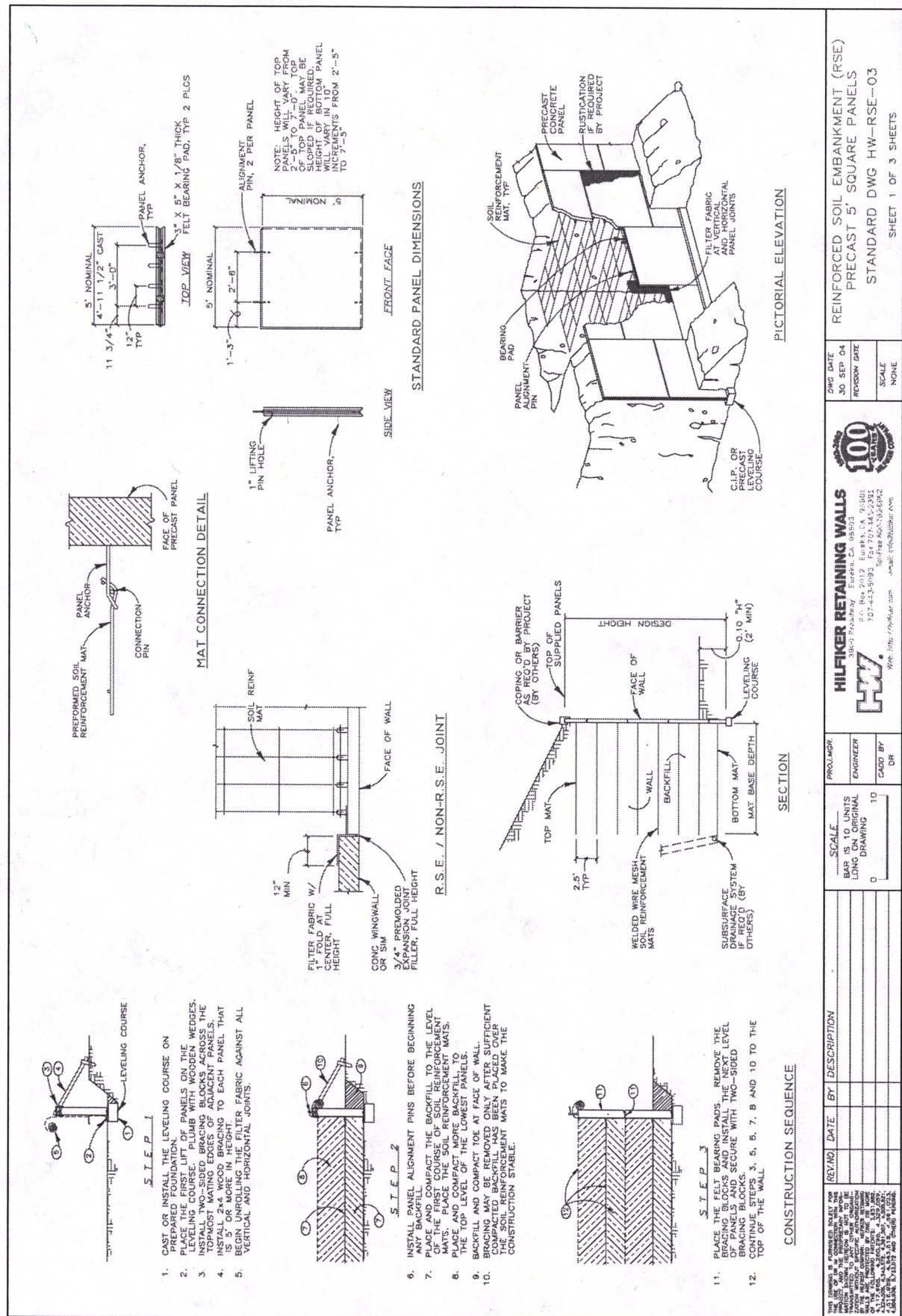
No HITEC evaluation report is currently available for this wall system. The design procedures used by Hilfiker Retaining Walls are based on the AASHTO Standard Specifications for Highway Bridges (2002). Therefore, for internal stability of the wall, the AASHTO Simplified Method shall be used. Interim approval is given for the continued use of the AASHTO Standard Specifications as the basis for design.

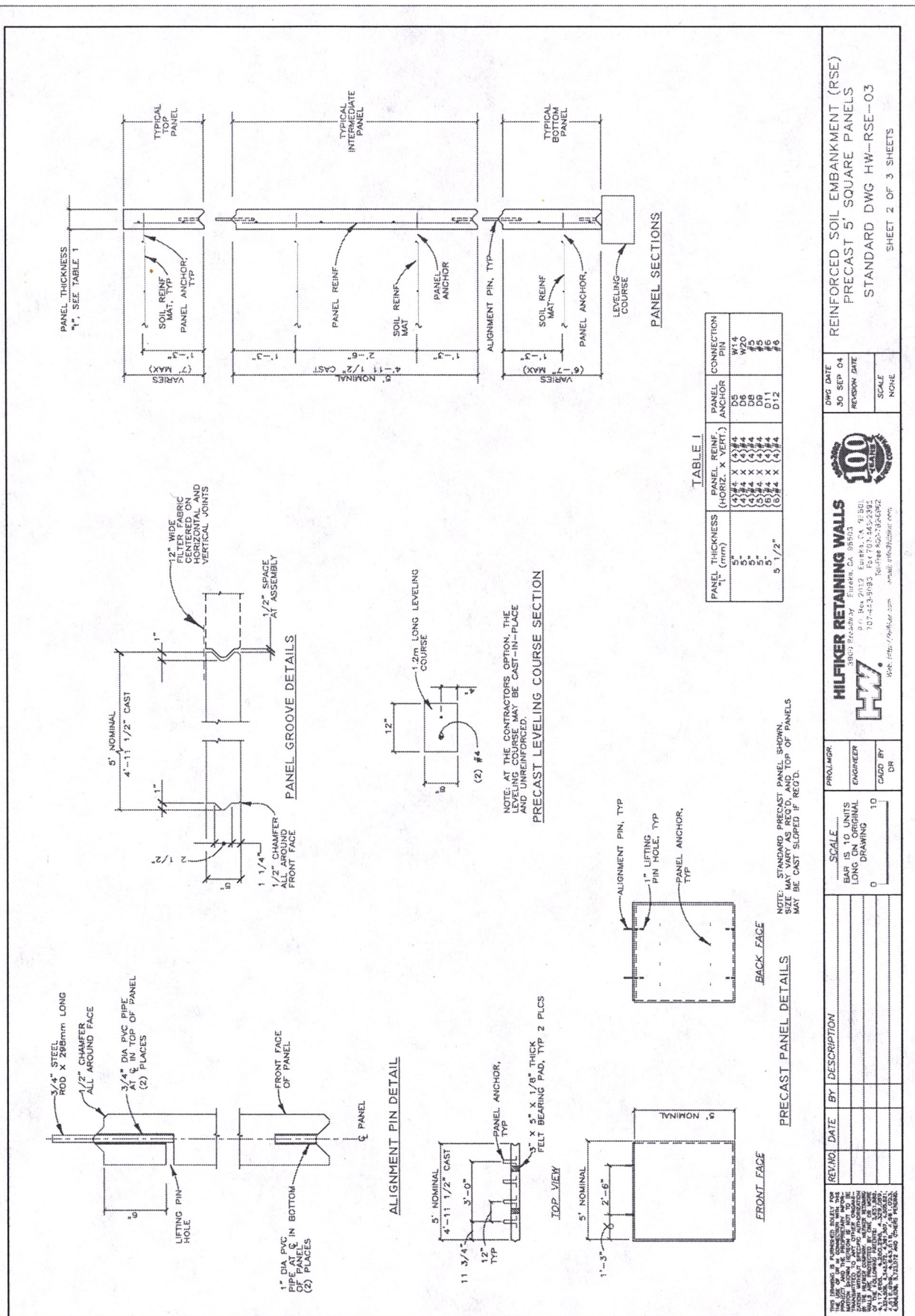
Note the connector shall be designed to have adequate life considering corrosion loss. Furthermore, the connector loops embedded in the facing panels shall be lined up such that the steel grid reinforcement cross bar at the connection is uniformly loaded. Therefore, regarding the alignment of the bearing surfaces of the embedded anchors, once the steel welded wire grid is inserted into the loops, no loop shall have a gap between the loop and the steel welded wire grid cross bar of more than 0.125 inch.

Reinforcement pullout shall be calculated based on the default values for steel grid reinforcement provided in the AASHTO Specifications. If, at some future time product and soil specific pullout data is provided to support use of non-default pullout interaction coefficients, it should be noted that LRFD pullout resistance design using these product and soil specific interaction coefficients has not been calibrated using product specific data statistics and reliability theory. Therefore, the specified resistance factors in the GDM and AASHTO LRFD Specifications should not be considered applicable to product specific pullout interaction coefficients.

Approved details for the Hilfiker Eureka Reinforced Soil concrete 5 ft x 5 ft panel faced retaining wall system are provided in the following plan sheets. Exceptions and additional requirements regarding the approved details are as follows:

- Regarding the filter fabric shown, WSDOT reserves the right to require the use WSDOT Standard Specification materials as specified in Standard Specification Section 9-33 that are similar to those specified in this plan sheet.

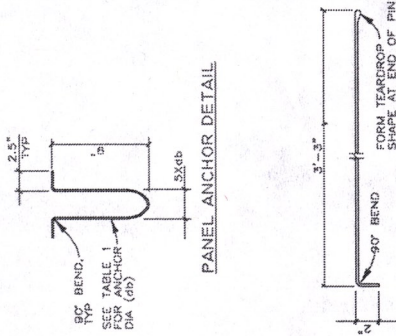
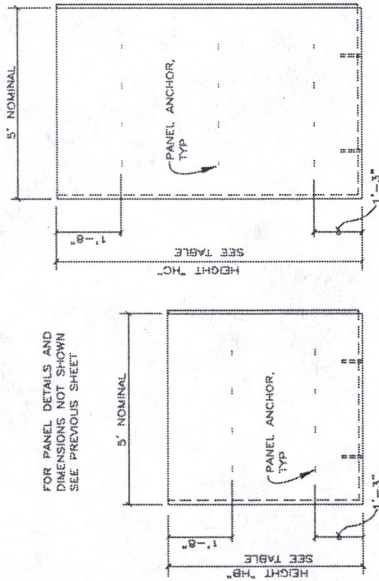




TOP PANEL TABLE

PANEL DESIGNATION	PANEL HEIGHT (FEET)	PANEL HEIGHT (METERS)
T1	2'-0"	0.61
T2	2'-6"	0.76
T3	3'-0"	0.91
T4	3'-6"	1.07
T5	4'-0"	1.22
T6	4'-6"	1.37
T7	5'-0"	1.52
T8	5'-6"	1.68
T9	6'-0"	1.83
T10	6'-6"	1.98
T11	7'-0"	2.13

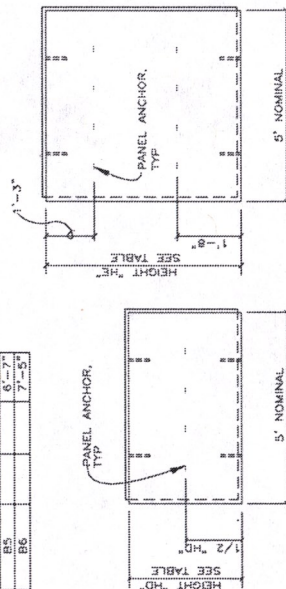
FOR PANEL DETAILS AND DIMENSIONS NOT SHOWN SEE PREVIOUS SHEET



TOP PANEL DETAILS (BACK FACE)

BOTTOM PANEL TABLE

PANEL DESIGNATION	PANEL HEIGHT (FEET)	PANEL HEIGHT (METERS)
B1	2'-0"	0.61
B2	2'-6"	0.76
B3	3'-0"	0.91
B4	3'-6"	1.07
B5	4'-0"	1.22
B6	4'-6"	1.37



BOTTOM PANEL DETAILS (BACK FACE)

CONNECTION PIN DETAIL

THIS DRAWING IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE USER TO OBTAIN THE NECESSARY PERMITS AND TO VERIFY THE DESIGN WITH THE LOCAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR THE DESIGN AND THE CONSTRUCTION OF THE RETAINING WALL. THE USER SHALL BE RESPONSIBLE FOR THE DESIGN AND THE CONSTRUCTION OF THE RETAINING WALL. THE USER SHALL BE RESPONSIBLE FOR THE DESIGN AND THE CONSTRUCTION OF THE RETAINING WALL.

REV.	NO.	DATE	BY	DESCRIPTION

SCALE	1" = 10' UNITS LONG ON ORIGINAL DRAWING
PROJ. MGR.	
ENGINEER	
CADD BY	
DR	

HILFIKER RETAINING WALLS

 100 YEARS
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REINFORCED SOIL EMBANKMENT (RSE)
 PRECAST 5' SQUARE PANELS
 STANDARD DWG HW-RSE-03
 SHEET 3 OF 3 SHEETS